

Application No. 09/882,314

-2-

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (previously presented) An interface method for viewing and selecting
2 among a variety of currently available commercial broadcasts comprising the
3 steps of:
 - 4 determining an association of each said commercial broadcast
5 with a program category of a plurality of program categories; and
6 within a single viewing screen, simultaneously presenting video
7 broadcast information directly from full-scale video information for each of said
8 commercial broadcasts, including:
 - 9 (1) generating reduced-scale presentations of each of said
10 commercial broadcasts, including locally originating said reduced-scale
11 presentations from said full-scale video information for exclusive display on
12 said viewing screen; and
13 (2) dynamically clustering said reduced-scale presentations in
14 correspondence with said program categories, including displaying a plurality
15 of clusters of said reduced-scale presentations in which each said cluster
16 includes said reduced-scale presentations for all of said commercial
17 broadcasts associated with said program category that corresponds to said
18 cluster;
19 thereby utilizing said viewing screen to display each said cluster
20 as a totality of said commercial broadcasts that are currently available within
21 said program category that corresponds to said cluster.
- 1 2. (original) The interface method of claim 1 wherein said step of dynamically
2 clustering includes varying a number of said reduced-scale presentations in
3 said clusters as a function of changes in said commercial broadcasts.

Application No. 09/882,314

-3-

1 3. (previously presented) The interface method of claim 2 wherein said
2 commercial broadcasts are television broadcasts carried via television
3 channels, said step of determining said association for each said commercial
4 broadcast including monitoring reception of said television channels at a
5 location of said viewing screen to detect tag information that is specific to
6 current programs available via said television channels.

1 4. (original) The interface method of claim 1 further comprising a step of
2 enabling a user to initiate a genre-dividing mode in which at least one said
3 cluster is split into separate sub-clusters on a basis of genres.

1 5. (original) The interface method of claim 4 wherein said step of enabling
2 said user includes providing cluster splitting into said sub-clusters on the basis
3 of different sports and on the basis of different movie genres.

1 6. (original) The interface method of claim 1 wherein said step of presenting
2 said video broadcast information includes overlapping said reduced-scale
3 presentations within at least one said cluster, said interface method further
4 comprising steps of:

5 (1) enabling a user to select which said reduced-scale
6 presentation in said at least one cluster has the appearance of being the
7 foremost reduced-scale presentation; and
8 (2) enabling said user to select any said reduced-scale
9 presentation in any said cluster for viewing in a full-screen mode of operation.

1 7. (original) The interface method of claim 6 further comprising steps of:
2 maintaining historical information regarding user selections; and
3 arranging said clusters and arranging said reduced-scale
4 presentations within said clusters as a function of said historical information.

1 8. (cancelled)

Application No. 09/882,314

-4-

1 9. (previously presented) The interface method of claim 1 wherein said step
2 of generating said reduced-scale presentations includes displaying incoming
3 television programs in real time, such that said reduced-scale presentations in
4 each said cluster are miniaturized displays which are in constant
5 synchronization with said television programs.

1 10. (cancelled)

1 11. (currently amended) An interface method for viewing and selecting
2 among a variety of television channels comprising the steps of:
3 receiving program transmissions at a particular site via said
4 television channels, each said program transmission being defined by video
5 signals currently available via a particular associated one of said television
6 channels;
7 recurrently identifying a program category for each said
8 television channel on a basis of a currently available program being broadcast
9 via ~~variety of~~ said television channels, ~~channel~~, said identifying occurring at
10 said particular site;
11 originating reduced-scale presentations of each said currently
12 available program from said video signals received via said television
13 channels so as to enable viewing of said currently available programs,
14 ~~program~~, said reduced-scale presentations being a manipulation of said video
15 signals that is original to said particular site;
16 displaying each said presentation on a single screen at said
17 particular site, including grouping said presentations on a basis of said
18 program categories, thereby displaying a number of groups that corresponds
19 to the number of program categories, with each well populated group having
20 overlapping presentations;
21 enabling a viewer to remotely control browsing through said
22 groups and browsing among said presentations within a specific group; and
23 enabling said viewer to select a particular said presentation for
24 full-screen viewing of the program from which said particular presentation was
25 originated, wherein each selection for said full-screen viewing is exclusive to
26 said single screen.

Application No. 09/882,314

-5-

1 12. (original) The interface method of claim 11 further comprising a step of
2 arranging said groups and said presentations within said groups as a function
3 of historical information that is representative of prior selections by said
4 viewer.

1 13. (original) The interface method of claim 11 further comprising a step of
2 enabling said viewer to selectively increase or decrease said number of
3 groups by increasing or decreasing said number of program categories.

1 14. (original) The interface method of claim 13 wherein said step of enabling
2 increases includes providing cluster splitting according to genres and includes
3 merging previously split clusters.

1 15. (currently amended) A system for viewing and selecting among a variety
2 of currently available commercial broadcasts comprising:
3 a detector configured to identify each said commercial broadcast
4 with a program category of a plurality of program categories;
5 a video processor connected to receive said commercial
6 broadcasts and configured to output reduced-scale presentations of said
7 commercial broadcasts ~~from said variety of commercial broadcasts~~, said
8 reduced-scale presentations being continuously updated video broadcast
9 information; and
10 a viewing screen cooperative with said detector and said video
11 processor to display said reduced-scale presentations in clusters that have a
12 one-to-one correspondence with said program categories, with all of said
13 commercial broadcasts that are identified with one of said program categories
14 being simultaneously displayed, said video processor and said viewing screen
15 being operatively associated such that said reduced-scale presentations are
16 available exclusively for said viewing screen.

1 16. (cancelled)

Application No. 09/882,314

-6-

1 17. (previously presented) The system of claim 15 wherein said video
2 processor is configured to continuously update said video broadcast
3 information relevant to each said reduced-scale presentation, such that said
4 reduced-scale presentations are ongoing displays of said commercial
5 broadcasts in real time.

1 18. (cancelled)

1 19. (original) The system of claim 15 further comprising memory connected
2 to store historical information indicative of selections of said commercial
3 broadcasts by a viewer, said memory being accessed by said video processor
4 to control arrangement of said clusters and said reduced-scale presentations
5 within said clusters as a function of said historical information.

1 20. (previously presented) The interface method of claim 11 wherein said
2 originating is a miniaturization of each said currently available program, such
3 that said displaying enables continuous viewing of said program
4 transmissions but at a miniaturized level.

Application No. 09/882,314

-7-

21. (previously presented) An interface method for viewing and selecting among a variety of currently available commercial broadcasts comprising the steps of:

- 1 determining an association of each said commercial broadcast
- 2 with a program category of a plurality of program categories; and
- 3 within a single viewing screen, simultaneously presenting video
- 4 broadcast information directly from each of said commercial broadcasts,
- 5 including:
 - 6 (1) generating reduced-scale presentations of each of said
 - 7 commercial broadcasts, said reduced-scale presentations being based on
 - 8 said video broadcast information; and
 - 9 (2) dynamically clustering said reduced-scale presentations in
 - 10 correspondence with said program categories, including displaying a plurality
 - 11 of clusters of said reduced-scale presentations in which each said cluster
 - 12 includes said reduced-scale presentations for all of said commercial
 - 13 broadcasts associated with said program category that corresponds to said
 - 14 cluster;
 - 15 thereby utilizing said viewing screen to display each said cluster
 - 16 as a totality of said commercial broadcasts that are currently available within
 - 17 said program category that corresponds to said cluster;
 - 18 wherein said step of presenting said video broadcast information
 - 19 includes overlapping said reduced-scale presentations within at least one said
 - 20 cluster, said interface method further comprising steps of:
 - 21 (a) enabling a user to select which said reduced-scale
 - 22 presentation in said at least one cluster has the appearance of being the
 - 23 foremost reduced-scale presentation;
 - 24 (b) enabling said user to select any said reduced-scale
 - 25 presentation in any said cluster for viewing in a full-screen mode of operation;
 - 26 and
 - 27 (c) cycling an arrangement of said overlapping reduced-scale
 - 28 presentations in said at least one cluster such that each said overlapping
 - 29 reduced-scale presentation is periodically said foremost reduced-scale
 - 30 presentation.

Application No. 09/882,314

-8-

- 1 22. (previously presented) A system for viewing and selecting among a
2 variety of currently available commercial broadcasts comprising:
3 a detector configured to identify each said commercial broadcast
4 with a program category;
5 a video processor connected to receive said commercial
6 broadcasts and configured to output reduced-scale presentations of said
7 commercial broadcasts, said reduced-scale presentations being video
8 broadcast information, said video processor being configured to continuously
9 update said video broadcast information relevant to each said reduced-scale
10 presentation;
11 a commercial filter enabled to detect commercials and to inhibit
12 said continuous updating during commercial times; and
13 a viewing screen cooperative with said detector and said video
14 processor to display said reduced-scale presentations in clusters that have a
15 one-to-one correspondence with said program categories, with all of said
16 commercial broadcasts that are identified with one of said program categories
17 being simultaneously displayed.

Application No. 09/882,314

-9-

18 23. (new) An interface method for viewing and selecting among a variety of
19 currently available commercial broadcasts comprising the steps of:
20 determining an association of each said commercial broadcast
21 with a program category of a plurality of program categories; and
22 within a single viewing screen, simultaneously presenting video
23 broadcast information directly from full-scale video information for each of said
24 commercial broadcasts, including:
25 (1) generating reduced-scale presentations of each of said
26 commercial broadcasts, including locally originating said reduced-scale
27 presentations from said full-scale video information for exclusive display on
28 said viewing screen; and
29 (2) dynamically clustering said reduced-scale presentations in
30 correspondence with said program categories, including displaying a plurality
31 of clusters of said reduced-scale presentations in which each said cluster
32 includes said reduced-scale presentations for all of said commercial
33 broadcasts associated with said program category that corresponds to said
34 cluster;
35 thereby utilizing said viewing screen to display each said cluster
36 as a totality of said commercial broadcasts that are currently available within
37 said program category that corresponds to said cluster;
38 wherein said step of generating said reduced-scale
39 presentations includes:
40 (a) displaying incoming television programs in real time, such
41 that said reduced-scale presentations in each said cluster are miniaturized
42 displays which are in constant synchronization with said television programs;
43 and
44 (b) filtering television commercials, such that said reduced-
45 scale presentations are static during said television commercials.